

DOCKET NO.: MS303526.1/MSFTP474US

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re patent application of

Applicant: **Eric J. Horvitz, et al.**

Serial No.: **10/610,487**

Filed: **June 30, 2003**

For: **POSITIONING AND RENDERING NOTIFICATION HERALDS BASED ON  
USER'S FOCUS OF ATTENTION AND ACTIVITY**

Art Unit: **2141**

Examiner: **Unknown**

**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

1. Pursuant to 37 C.F.R. §1.97 and §1.98, and in compliance with 37 C.F.R. §1.56, the Office's attention is directed to the patents, publications and other information listed on the attached PTO-1449. A copy of each listed document is enclosed except for: (a) pending applications; (b) those previously cited or submitted to the Office in the following application(s) upon which this application relies for an earlier filing date under 35 U.S.C. §120; and/or (c) U.S. Patent(s) and published applications(s).

Serial No.:	10/220,419	10/220,550
Filing Date:	8-30-02	8-30-02

Regarding any document, publication or other information for which a date is not given on the attached PTO-1449, Applicant(s) believe(s) the same may qualify as "prior" art to this application and should be treated accordingly, although Applicant(s) reserve(s) the right to contest the prior art status of any document, publication or information, should issue arise.

2. Regarding each listed document that is not in the English language, an English-language translation accompanies this Statement as indicated on the attached PTO-1449 or a concise explanation of the relevance of the document is set forth in the following document(s):


- (a) ☐ Copy of each English language version of a search report indicating the degree of relevance found by the foreign office of each document being submitted from the search report.
- (b) ☐ Attachment entitled "Concise Explanation of Relevance of Non-English Language Documents".

3. Pursuant to 37 C.F.R. §1.97(b) this Statement is being filed (one must be checked):

- (a) ☐ Within 3 months of the filing date or date of entry into the National Stage.
- (b) ☒ Before the mailing date of a first Office Action on the merits. If this Statement is not filed before the mailing date of a first Office Action on the merits, the required certification is given below or, in the absence thereof, the Office is authorized to charge the required fee set forth in 37 C.F.R. §1.17(p) to Deposit Account No. 50-1063 for consideration of this Statement.
- (c) ☐ Before the mailing date of an Office Action after the filing of a request for continued examination under 1.114.

- (d) ☐ After the period set forth in 37 C.F.R. §1.97(b) but before the mailing date of either a final action or a notice of allowance.
- (1) ☐ The required certification is given below, or
- (2) ☐ Regarding the fee set forth in 37 C.F.R. §1.17(p) for consideration of this Statement :
- (i) ☐ Enclosed is a check covering the fee;
- (ii) ☐ Charge the fee set forth in 37 C.F.R. §1.17(p) to Deposit Account No. 50-1063; or
- (iii) ☐ Enclosed is a credit card payment form covering the fee.
- (e) ☐ After the mailing date of either a final action or a notice of allowance, but before payment of the issue fee. Petition hereby is made for consideration of this Statement and the required certification is indicated below. Regarding the fee set forth in 37 C.F.R. §1.17(i)(1) for consideration of this Statement:
- (1) ☐ Enclosed is a check covering the fee;
- (2) ☐ Charge the fee set forth in 37 C.F.R. §1.17(i)(1) to Deposit Account No. 50-1063; or
- (3) ☐ Enclosed is a credit card payment form covering the fee.
4. Certification (if applicable)
- (a) ☐ The undersigned hereby certifies that each item of information contained in this Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than 3 months prior to the filing of this Statement.
- (b) ☐ The undersigned hereby certifies that no item of information contained in this Statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the undersigned's knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. §1.56(c) more than 3 months prior to the filing of this Statement.
5. The Commissioner is hereby authorized to charge any additional fees or credit any overpayment to Deposit Account No. 50-1063.

Respectfully Submitted,


By   
Jeffrey R. Sadlowski  
Reg. No. 47,914

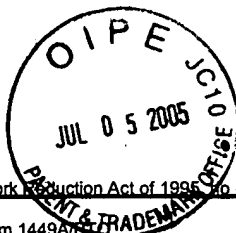
Amin & Turocy, LLP  
24<sup>TH</sup> Floor, National City Center  
1900 East 9<sup>th</sup> Street  
Cleveland, Ohio 44114  
(216) 696-8730

CERTIFICATE OF MAILING

I hereby certify that this correspondence (along with any paper referenced as being attached or enclosed) is being deposited on the below date with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450. Alexandria, VA 22313-1450.

6-29-2005  
Date

  
Jeffrey R. Sadlowski



PTO/SB/08a (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A

**SUPPLEMENTAL INFORMATION  
DISCLOSURE STATEMENT  
BY APPLICANT**

(Use as many sheets as necessary)

Sheet 1 of 5

**Complete if Known**

Application Number	10/610,487
Filing Date	June 30, 2003
First Named Inventor	Eric J. Horvitz
Art Unit	2141
Examiner Name	Unknown
Attorney Docket Number	MS303526.01/MSFTP474US

**U. S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
		US- 6,513,046	01-28-2003	Abbott, III et al.	
		US- 6,747,675	06-08-2004	Abbott et al.	
		US- 6,801,223	10-05-2004	Abbott et al.	
		US- 6,842,877	01-11-2005	Robarts et al.	
		US- 6,466,232	10-15-2002	Newell et al.	
		US- 6,549,915	04-15-2003	Abbott, III et al.	
		US- 6,791,580	09-14-2004	Abbott et al.	
		US- 6,812,937	11-02-2004	Abbott et al.	
		US- 2001/0040591	11-15-2001	Abbott et al.	
		US- 2001/0043232	11-22-2001	Abbott et al.	
		US- 2002/0044152	04-18-2002	Abbott, III et al.	
		US- 2002/0052963	05-02-2002	Abbott et al.	
		US- 2002/0054174	05-09-2002	Abbott et al.	
		US- 2002/0080155	06-27-2002	Abbott et al.	
		US- 2002/0083025	06-27-2002	Robarts et al.	
		US- 2002/0087525	07-04-2002	Abbott et al.	
		US- 2003/0046401	03-06-2003	Abbott et al.	
		US- 2005/0034078	02-10-2005	Abbott et al.	

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				

Examiner  
SignatureDate  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

**SUPPLEMENTAL INFORMATION  
DISCLOSURE STATEMENT  
BY APPLICANT**

(Use as many sheets as necessary)

Sheet

2

of

5

**Complete if Known**

Application Number	10/610,487
Filing Date	June 30, 2003
First Named Inventor	Eric J. Horvitz
Art Unit	2141
Examiner Name	Unknown
Attorney Docket Number	MS303526.1/MSFTP474US

**U. S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
		US- 2001/0040590	11-15-2001	Abbott et al.	
		US- 2001/0043231	11-22-2001	Abbott et al.	
		US- 2002/0032689	03-14-2002	Abbott, III et al.	
		US- 2002/0052930	05-02-2002	Abbott et al.	
		US- 2002/0054130	05-09-2002	Abbott, III et al.	
		US- 2002/0078204	06-20-2002	Newell et al.	
		US- 2002/0080156	06-27-2002	Abbott et al.	
		US- 2002/0083158	06-27-2002	Abbott et al.	
		US- 2002/0099817	07-25-2002	Abbott et al.	
		US- 2003/0154476	08-14-2003	Abbott, III et al.	
		US- 5,603,054	02-11-1997	Theimer et al.	
		US- 5,555,376	09-10-1996	Theimer et al.	
		US- 5,611,050	03-11-1997	Theimer et al.	
		US- 5,544,321	08-06-1996	Theimer et al.	
		US- 5,493,692	02-20-1996	Theimer et al.	
		US- 5,812,865	09-22-1998	Theimer et al.	
		US-			
		US-			

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				

Examiner  
SignatureDate  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO <b>SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	10/610,487
				Filing Date	June 30, 2003
				First Named Inventor	Eric J. Horvitz
				Art Unit	2141
				Examiner Name	Unknown
Sheet	3	of	5	Attorney Docket Number	MS303526.1/MSFTP474US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		ANDY HARTER, et al., A Distributed Location System for the Active Office, IEEE Network, 1994, pp. 62-70.	
		GUANLING CHEN, et al., A Survey of Context-Aware Mobile Computing Research, Dartmouth Computer Science Technical Report, 2000, 16 pages.	
		WILLIAM NOAH SCHILT, A System Architecture for Context-Aware Mobile Computing, Columbia University, 1995, 153 pages.	
		MIKE SPREITZER, et al., Providing Location Information in a Ubiquitous Computing Environment, SIGOPS '93, 1993, pp.270-283.	
		MARVIN THEIMER, et al., Operating System Issues for PDAs, In Fourth Workshop on Workstation Operating Systems, 1993, 7 pages.	
		ROY WANT, Active Badges and Personal Interactive Computing Objects, IEEE Transactions on Consumer Electronics, 1992, 11 pages, Vol. 38 - No. 1.	
		BILL N. SCHILIT, et al., The ParcTab Mobile Computing System, IEEE WWOS-IV, 1993, 4 pages.	
		BILL SCHILIT, et al., Context-Aware Computing Applications, In Proceedings of the Workshop on Mobile Computing Systems and Applications, December 1994. pp. 85-90.	
		BILL N. SCHILIT, et al., Customizing Mobile Applications, Proceedings USENIX Symposium on Mobile and Location Independent Computing, August 1993, 9 pages.	
		MIKE SPREITZER, et al., Architectural Considerations for Scalable, Secure, Mobile Computing with Location Information, In The 14th International Conference on Distributed Computing Systems, June 1994. pages 29-38.	

Examiner Signature	Date Considered
--------------------	-----------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO <b>SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>			<b>Complete if Known</b>		
			Application Number	10/610,487	
			Filing Date	June 30, 2003	
			First Named Inventor	Eric J. Horvitz	
			Art Unit	2141	
			Examiner Name	Unknown	
Sheet	4	of	5	Attorney Docket Number	MS303526.1/MSFTP474US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		MIKE SPREITZER et al., Scalable, Secure, Mobile Computing with Location Information, Communications of the ACM, July 1993, 1 page, Vol. 36 - No. 7.	
		ROY WANT, et al., The Active Badge Location System, ACM Transactions on Information Systems, January 1992, pp. 91-102, Vol. 10 - No. 1.	
		MARK WEISER, Some Computer Science Issues in Ubiquitous Computing, Communications of the ACM, July 1993, pp. 75-84, Vol. 36 - No. 7.	
		M. BILLINGHURST, et al., An Evaluation of Wearable Information Spaces, Proceedings of the Virtual Reality Annual International Symposium, 1998, 8 pages.	
		BRADLEY J. RHODES, Remembrance Agent: A continuously running automated information retrieval system, The Proceedings of The First International Conference on The Practical Application Of Intelligent Agents and Multi Agent Technology, 1996, pp. 487-495.	
		ERIC HORVITZ, et al., In Pursuit of Effective Handsfree Decision Support: Coupling Bayesian Inference, Speech Understanding, and User Models, 1995, 8 pages.	
		BRADLEY J. RHODES, The Wearable Remembrance Agent: A System for Augmented Theory, The Proceedings of The First International Symposium on Wearable Computers, October 1997, pp. 123-128.	
		ERIC HORVITZ, et al., Attention-Sensitive Alerting in Computing Systems, Microsoft Research, August 1999.	
		BILL N. SCHILIT, et al., Disseminating Active Map Information to Mobile Hosts, IEEE Network, 1994, pages 22-32, Vol. 8 - No. 5.	
		MARK BILLINGHURST, et al., Wearable Devices: New Ways to Manage Information, IEEE Computer Society, January 1999, pp. 57-64.	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO <b>SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	10/610,487
				Filing Date	June 30, 2003
				First Named Inventor	Eric J. Horvitz
				Art Unit	2141
				Examiner Name	Unknown
Sheet	5	of	5	Attorney Docket Number	MS303526.1/MSFTP474US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		THAD EUGENE STARNER, Wearable Computing and Contextual Awareness, Massachusetts Institute of Technology, June 1999, 248 pages.	
		BRADLEY J. RHODES, The Wearable Remembrance Agent: A System for Augmented Memory, Personal Technologies Journal Special Issue on Wearable Computing, 1997, 12 pages.	
		Workshop on Wearable Computing Systems, August 19-21, 1996.	
		MARK BILLINGHURST, Research Directions in Wearable Computing, University of Washington, May, 1998, 48 pages.	
		Mark Weiser, The Computer for the 21st Century, Scientific American, September 1991, pp. 94-104, Vol. 265 - No. 3.	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.